

From wang!elf.wang.com!ucsd.edu!info-hams-relay Mon Apr 8 19:48:36 1991 remote
from tosspot
Received: by tosspot (1.64/waf)
via UUCP; Mon, 08 Apr 91 21:38:33 EST
for lee
Received: from somewhere by elf.wang.com id aa26932; Mon, 8 Apr 91 19:48:35 GMT
Received: from ucsd.edu by relay1.UU.NET with SMTP
(5.61/UUNET-shadow-mx) id AA25316; Mon, 8 Apr 91 15:44:28 -0400
Received: by ucsd.edu; id AA11692
sendmail 5.64/UCSD-2.1-sun
Mon, 8 Apr 91 04:30:06 -0700 for nixbur!schroeder.pad
Received: by ucsd.edu; id AA11686
sendmail 5.64/UCSD-2.1-sun
Mon, 8 Apr 91 04:30:03 -0700 for /usr/lib/sendmail -oc -odb -oQ/var/spool/
lqueue -oi -finfo-hams-relay info-hams-list
Message-Id: <9104081130.AA11686@ucsd.edu>
Date: Mon, 8 Apr 91 04:30:02 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>
Reply-To: Info-Hams@ucsd.edu
Subject: Info-Hams Digest V91 #279
To: Info-Hams@ucsd.edu

Info-Hams Digest Mon, 8 Apr 91 Volume 91 : Issue 279

Today's Topics:

10 MTR BAND INDUSTRIAL INVASION!

ATV: what about PM?

FSTV

KIDS IN SPACE: Articles will continue at 10.00 EET DST approx.

KIDS IN SPACE: Who, What, Where and When at HUT (2/8)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>

Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 8 Apr 91 02:45:11 GMT

From: swrinde!elroy.jpl.nasa.gov!sdd.hp.com!spool.mu.edu!uwm.edu!ux1.cso.uiuc.edu!
phil@ucsd.edu

Subject: 10 MTR BAND INDUSTRIAL INVASION!

To: info-hams@ucsd.edu

W10J@KA1SRD writes:

>When the band is open from my area to the South Central part of
>the continent (perhaps Texas or New Mexico) I hear most of this
>trash. Specifically, what you will hear are unstable, cyclic and
>drifting AC modulated signals cross great portions of 28.5 to
>29.5 Mhz.

What is the possibility that this is from bad electrical lines that
happen to have lengths grounds or taps that tend to enmasse filter
noise that would otherwise be broadbanded?

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/*****\
/ Phil Howard -- KA9WGN -- phil@ux1.cso.uiuc.edu      \
\ Lietuva laisva -- Brivu Latviju -- Eesti vabaks      /
\*****/
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Date: 8 Apr 91 03:00:53 GMT
From: sdd.hp.com!spool.mu.edu!uwm.edu!ux1.cso.uiuc.edu!phil@ucsd.edu
Subject: ATV: what about PM?
To: info-hams@ucsd.edu

What about the possibility of using PHASE modulation for ATV (or just TV)?

If the pre-emphasis on FM tends to favor the high frequencies, then PM will
not make things worse since it will already have such a favoring (though
perhaps too much, but a pre-emphasis can reverse this as well).

I am still interested in finding ways to enhance received TV signals by
using a frame (or field) averager. This would be for signals that appear
to be under the noise level as conventionally received.

If the modulation index is low enough, the phases are less likely to be
so different from one frame to the next to cancel each other out.

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/*****\
/ Phil Howard -- KA9WGN -- phil@ux1.cso.uiuc.edu      \
\ Lietuva laisva -- Brivu Latviju -- Eesti vabaks      /
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Date: 8 Apr 91 03:42:46 GMT
From: sdd.hp.com!zaphod.mps.ohio-state.edu!uwm.edu!ux1.cso.uiuc.edu!phil@ucsd.edu

Subject: FSTV
To: info-hams@ucsd.edu

sehrlich@helios.northeastern.edu writes:

>Is it possible to receive Fast Scan TV [ATV / FSTV] through an HT
>capable of operation in the 430 - 440 Mhz segment of the 70cm band?
>How about transmission of FSTV?

Only with some *MAJOR* modifications.

>How about reception of FSTV on a scanner capable of receiving in the
>same area?

Only with some major modifications except for the Icom R-7000 and R-9000.

--
/*****\

/ Phil Howard -- KA9WGN -- phil@ux1.cso.uiuc.edu	\
\ Lietuva laisva -- Brivu Latviju -- Eesti vabaks	/
/*****\	

Date: 7 Apr 91 23:39:12 GMT
From: mcsun!fuug!funic!santra!nntp!paivi@uunet.uu.net
Subject: KIDS IN SPACE: Articles wil continue at 10.00 EET DST approx.
To: info-hams@ucsd.edu

! OBS ! that all followup articles are now directed to comp.edu, please
change your Newsgroups: line if you want to respond in another group.
In Finnish: Suomenkieliset jutut sfnet.keskusteluun, kiitos.

I will now go home (it is 0035 AM in Finland = 19.35 EST DST). If you
want to know more before (our) morning, use

telnet 129.22.8.82

or any other of the Cleveland Freenet numbers:

telnet 129.22.8.75
telnet 129.22.8.76
telnet 129.22.8.77
telnet 129.22.8.78

The system is extremely easy to use. First, choose Guest. Then Explore
The System. From the Main Menu use the command 'go academy' (or simply
choose 8 = The Schoolhouse (Academy One)) and there you will surely
see, wich area is about the Space Mission (number 12).

If you telnet from far away places (like Europe), you may experience some "slowness" due to Network distance. This is normal.

Explore and Learn!

Paivi

@ Paivi Hyvarinen	@ Net: Paivi.Hyvarinen@hut.fi @
@ Comp. Sci. Major, Occup. Psych. minor	@
@ Data Guild, Helsinki Univ. of Technology	@ Also on Cleveland Freenet: @
@ Otakaari 1 M, SF-02150 Espoo, Finland	@ an614, mail forward -> HUT @

Date: 7 Apr 91 23:27:33 GMT
From: mcsun!fuug!funic!santra!nntp!paivi@uunet.uu.net
Subject: KIDS IN SPACE: Who, What, Where and When at HUT (2/8)
To: info-hams@ucsd.edu

! OBS ! that all followup articles are now directed to comp.edu, please change your Newsgroups: line if you want to respond in another group.
In Finnish: Suomenkieliset jutut sfnet.keskusteluun, kiitos.

EST DST is Eastern Standard Time (Cleveland, Ohio) = GMT DST - 5h
EET DST is East European Time (Finland) = GMT DST + 2h
(DST = Daylight Saving Time)

Here is a breaf overview of what will happen on Monday. This is very much HUT (Helsinki University of Technology) dominated, as I will be here.

08.15 EST DST = 15.15 EET DST

* First weather reports to Academy One from Finland and Cleveland.
(California still fast asleep)

08.30 EST DST = 15.30 EET DST

* SHUTTLE LAUNCH from Cleveland, Ohio (University School)
The mission begins.

After this the alternative landing sites will send weather reports on the hour. I am not quite sure how often the shuttle will communicate with Spce Mission Control at University School, but I suspect it will be much more often. The Solar Disturbance Monitoring Centre will probably also report everu hour or half-an-hour.

The mission will be monitored for one hour from HUT, all the guests (including all the main media in Finland) will be online watching.

09.30 EST DST = 16.30 EET DST

* Real-life (not cyberspace) Presentation of the Finnish MAP Project (Schools' new media, partly email, partly Hypercard), at Helsinki University of Technology, Espoo Finland (class Y198 at Main Building). Discussion of schools and computers. You may come in and listen, but please try to avoid disturbing.

10.00 EST DST = 17.00 EET DST

* Initialization of +SPACE_M and +SPACE_d on IRC. PLEASE READ THE INSTRUCTIONS IN ARTICLE 4 BEFORE YOU TRY TO JOIN +SPACE_M! It is the first time we try to use IRC in a coordinated manner, so have patience. +SPACE_d is a normal public channel, though. Use it, if you don't want to hassle with strict channel rules and invite-only (+SPACE_M will be /MODE * +itn). If you join +SPACE, you will receive a "Channel Rules" private message from a channel op. Any non-operator using /INVITE on +SPACE_M will be mercilessly first /KICKed (with a following explanation) and, if the offence happens again, /KILLED.

The channel +SPACE_M will be used for one hour from HUT (maybe even other places), the guests still on-line.

11.00 EST DST = 18.00 EET DST

* Helsingin Sanomat, the biggest national newspaper in Finland, arrives. The HUT guest group go into Academy One again for one hour.

12.00 EST DST = 19.00 EET DST

* The second IRC session begins. It's +SPACE_M and +SPACE_d again. This also lasts for one hour.

13.00 EST DST = 20.00 EET DST

* HUT formal operations end as the university buildings close for the night. The still remaining guests move from Y198 upstairs, order pizza, roll their sleeves, let their hair down and start some _serious_ networking, alternating Academy One, IRC, telephone calls, faxes & stuff. (Ed. note: this is when the actual fun begins, I would think: I will have the possibility to be in IRC all the time now, for ex. as I will get windows instead of a dumb terminal).

Response times from HUT will probably go down a bit: I think we will

also discuss stuff here face-to-face. But we will be on the Net, have no fear.

16.30 EST DST = 22.30 EET DST

* The shuttle lands. The mission is over.

* I finally get to go home :-)

WELCOME TO CYBERSPACE WITH US! ...and wish us luck...

Paivi

@ Paivi Hyvarinen	@ Net: Paivi.Hyvarinen@hut.fi @
@ Comp. Sci. Major, Occup. Psych. minor	@
@ Data Guild, Helsinki Univ. of Technology	@ Also on Cleveland Freenet: @
@ Otakaari 1 M, SF-02150 Espoo, Finland	@ an614, mail forward -> HUT @

Date: 8 Apr 91 03:11:11 GMT
From: sdd.hp.com!news.cs.indiana.edu!ux1.cso.uiuc.edu!phil@ucsd.edu
To: info-hams@ucsd.edu

References <11806.27f641a1@zeus.unomaha.edu>, <8819@gollum.twg.com>,
<40583@netnews.upenn.edu>
Subject : Re: Codeless = worthless? (was Re: The first No-Code Ham is)

depolo@eniac.seas.upenn.edu (Jeff DePolo) writes:

>>Give me a break. Congratulations for NOT knowing something? If I'd come in
>>by this back door route I sure wouldn't be out advertising it in public. Let
>>the guy take his rightful place next to the mail-order Ph.D's.
>>AA6KX

First of all, Tech and Novice are now PEER entry points. The difference is that the NOVICE doesn't have to learn some practical radio knowledge and instead can get by with just memorizing a Morse Code table (yes, it CAN BE DONE THAT WAY at just 5 WPM).

Now back to Jeff...

>No, you give us a break. I seriously hope that your comment was in jest,
>but seeing no smilies, I'll assume it wasn't.

>Let's look at your above statement. You don't want to acknowledge
>Robert (N3IFY)'s achievement in getting his ticket because he didn't

>know code, or possibly knew the code but didn't bother taking the
>test, right? Then how do you feel about your own extra class license,
>knowing full well that you weren't tested on physics of semiconductors,
>vector algebra for antenna radiation patterns, or digital signal processing,
>all of which, in some way, have a part in amateur radio? After all,
>an extra class license is the highest class license - to get it, you should
>have to know EVERYTHING about amateur radio to pass the test, right?

We should have Extras take a 1500 question ORAL exam with a 96% passing
margin, PLUS a dissertation!!!! :-)

I'm having seconds thoughts about the smiley :-)

>CW is just one MODE, period. It's just like any other mode (ATV, FAX,
>Phone, SS, etc.). Why should it carry so much emphasis, particularly
>in the cases where it prevents or impedes would-be amateurs from joining
>the ranks? The fact of the matter is, it shouldn't. If Robert or
>any other no-code tech decides he wants to use code, then he or she
>has to learn the code. Same thing with any other mode - RTTY, ATV, etc.
>You need to understand it before you can use it.

Or he can use a computer.

>Ramming CW down someone's throat for historical reasons doesn't wash.
>Neither does the "I had to, so you have to" argument. CW has its
>merits, just like any other mode. But considering a no-code tech
>ham to be less of a ham than any other license holder due ONLY to the
>fact that they didn't pass a code test is disgustingly childish.

It's obvious that Bruce doesn't think Robert is as good as he (Bruce) is
just because Robert didn't express an interest in the same things same
that Bruce is interested in?

Oh by the way, I think I will start up a mail-order diploma business.
You can get a Ph.D of your very own by just proving that you can copy
Morse Code at 20 WPM. Why it might even be signed by Sam himself :-)

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/*****\
/ Phil Howard -- KA9WGN -- phil@ux1.cso.uiuc.edu \
\ Lietuva laisva -- Brivu Latviju -- Eesti vabaks /
\*****/
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Date: 8 Apr 91 03:40:00 GMT

From: sdd.hp.com!spool.mu.edu!news.cs.indiana.edu!ux1.cso.uiuc.edu!phil@ucsd.edu

To: info-hams@ucsd.edu

References <2659@ke4zv.UUCP>, <1991Apr3.201909.22363@grian.cps.altadena.ca.us>, <2692@ke4zv.UUCP>

Subject : Re: frequency standards

gary@ke4zv.UUCP (Gary Coffman) writes:

>Not many stations use a rubidium standard for their transmitters. The FCC
>required frequency tolerance for VHF TV transmitters is 1,000 hertz plus
>or minus of the assigned frequency. This is a looser tolerance than that
>of the color subcarrier (10 hz). Also quite a few stations do not operate
>on the standard channels. The Gannett station in Atlanta operates with
>a positive 10 khz offset from the standard channel.

This fact does not prevent the use of a rubidium standard. Whoever is calibrating on the signal will need to know the offset. But if they are at least close in calibration, it will be obvious (260 or 240 instead of 250).

>Note that if you want to use the color subcarrier of a broadcast signal
>as a reference, you must be very careful to only sample the subcarrier
>during burst interval. The subcarrier is FM modulated to transmit hue
>information and AM modulated to transmit color saturation information.
>Only the burst is held to a constant amplitude and phase.

I would beg to differ. It is QUADRATURE modulated. There is no ACCUMULATED phase or frequency shift. With a narrow enough filter all the intermittent effects of the modulation can be eliminated.

PAL is also QUADRATURE modulated. SECAM is the one that is FM modulated.

The net EFFECT of the way NTSC modulates the color subcarrier will appear to be an AM envelope of saturation and a PHASE vector for the hue. But it is actually specified in the standard in terms of a pair of composite signals called I and Q which are constructed by a formula I don't have at hand. The two signals are modulated with carriers that are 90 degrees apart in phase.

Cheap color bar generators use an oscillator that is exactly one horizontal frequency step away from the color subcarrier (and usually gated in narrow stripes). The effect is to make a rainbow that varies across the width of the screen.

PAL is similar to NTSC except that the polarity of the Q signal is flipped back and forth between each line. A phase error somewhere will cause one set of lines to shift in hue in one direction, and the other lines the other direction, having a cancelling effect in the eye when viewed at an adequate distance. The burst is also 45 degrees off and flip flops plus and minus. The frequency definition for PAL in Europe is also more complex (I don't

have it with me at the moment) and involves the vertical frequency rate as well. The results are better than NTSC.

NTSC is often referred to as Never Twice the Same Color.

But doing as Gary suggests to extract the subcarrier will still work, and is probably the cheapest way to do it if you are already extracting the horizontal sync, as a TV set would be doing.

If the color subcarrier is accurate (perhaps not) it should be plenty easy enough to extract by one method or another.

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/*****\
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\ Lietuva laisva -- Brivu Latviju -- Eesti vabaks /
\*****/
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Date: 8 Apr 91 03:21:31 GMT
From: swrinde!zaphod.mps.ohio-state.edu!rpi!uwm.edu!ux1.cso.uiuc.edu!phil@ucsd.edu
To: info-hams@ucsd.edu

References <8819@gollum.twg.com>, <40583@netnews.upenn.edu>,
<112293@unix.cis.pitt.edu>%
Subject : Re: Codeless = worthless? (was Re: The first No-Code Ham is)

hpb@hpb.cis.pitt.edu (Harry Bloomberg) writes:

> This topic seems more appropriate to rec.radio.amateur.policy. I
> think the discussion should be moved there.

The issue is NOT about rules, regulations, laws, or policies. It is about the nature of the amateur operator beast itself. It is about attitudes.

Yes, some issues of what rule changes were good or bad will still leak through. And THOSE should be on r.r.a.policy. However the issue of whether or not we should welcome new amateur radio operators who have licenses legally issued to them by the FCC belongs RIGHT HERE in r.r.a.misc

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/*****\
/ Phil Howard -- KA9WGN -- phil@ux1.cso.uiuc.edu \
\ Lietuva laisva -- Brivu Latviju -- Eesti vabaks /
\*****/
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Date: 8 Apr 91 02:54:52 GMT

From: swrinde!zaphod.mps.ohio-state.edu!sdd.hp.com!spool.mu.edu!uwm.edu!
ux1.cso.uiuc.edu!phil@ucsd.edu
To: info-hams@ucsd.edu

References <1029@sousa.enet.dec.com>, <1991Apr3.222646.9527@ux1.cso.uiuc.edu>,
<2693@ke4zv.UUCP>
Subject : Re: ATV: AM or FM

gary@ke4zv.UUCP (Gary Coffman) writes:

>>Not necessarily. Given that the lower frequency portions of the video
>>get more benefit from a constant deviation, being as the modulation index
>>is much higher, I'd expect that the high average power level is effectively
>>being dedicated unevenly, favoring the lower frequencies.

>

>But this is very desirable for video. Most of the important parts of the
>signal are at the low frequencies. The vital sync signals and the gross

OK, then filter your video down to some low bandpass.

>picture features are low frequency. The very fine picture detail is at
>the highest end of the video frequency spectrum. Noise here is not very
>noticeable. In fact we often will deliberately introduce some high frequency

I can see it quite easily.

>noise into a picture during the production process to mask some picture
>defect. It should be noted that AM modulation is designed to favor the

So THAT is what that is I see a lot. VCR's tend to have a LOT of it.

>sync components of the video. Peak modulation is at sync tip, black is
>at 70% and peak white is at 12.5%. Fine details in the picture tend not
>to have a very high depth of modulation and hover near the peak white
>value. Therefore AM TV also favors the lower frequency components by
>design. One exception to this low depth of modulation for high frequency
>components occurs in some character generators. They produce very high
>rise time, very deeply modulated edges on the lettering. In AM signals

Use the filter.

>this often results in overshoots beyond the 12.5% point all the way down to
>the zero point that will introduce "sync buzz" in the intercarrier audio.
>In FM signals this results in the familiar black sparklies on picture

I often see them in the middle of solid areas.

>edges. Many stations have resorted to low pass filters on their character

Ahh, good.

>generators to remove this annoyance. The filter slows the risetime of
>the edges and reduces their depth of modulation. The production department
>hates this because it makes keying the signal harder. So some stations
>filter their video at the transmitter input. Engineers hate this because
>it makes **all** video look softer than it should.

Perhaps a better filter that can apply itself non-linearly, that is, to
filter down the high frequencies only when they are greater than a certain
level, would do the trick. It would not apply itself when the high end
depth is low, but it would when that character generator comes in. I don't
know what the best time-constant would be for detecting it, though. I'd
suspect it should be fairly fast.

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/*****\
/ Phil Howard -- KA9WGN -- phil@ux1.cso.uiuc.edu \
\ Lietuva laisva -- Brivu Latviju -- Eesti vabaks \
\ *****/

Date: 8 Apr 91 03:18:13 GMT
From: sdd.hp.com!caen!uwm.edu!ux1.cso.uiuc.edu!phil@ucsd.edu
To: info-hams@ucsd.edu

References <8819@gollum.twg.com>, <40583@netnews.upenn.edu>, <10006@jjmhome.UUCP>
Subject : Re: Codeless = worthless? (was Re: The first No-Code Ham is)

km3t@jjmhome.UUCP (Dave Pascoe) writes:

>Jeff's right....this is ridiculous. This kind of attitude will only serve
>to alienate the new Technicians. I listen around the bands and hear the same
>sort of crap day in and day out. This is the kind of attitude that prevents
>people from even wanting to operate CW.....

Specifically WHICH bands?

I would actually be surprised if it would be found among the CW'ers
themselves since they tend to an intelligent, open minded, and well
behaved group. I suspect you'd find it mostly among the voice modes,
both on HF (where the whole issue is as irrelevant) and on VHF, most
particularly on 2m meters and on 70cm closed repeaters.

>I, for one, love CW and it's my primary mode on HF....but there's a hell of a
>lot more to Ham Radio than CW. CW, as Jeff mentions, is merely ONE MODE out
>of many. It shouldn't be a prerequisite to making a contribution to this

>hobby.

>I've heard some of the new Codeless Techs on the air and they are no
>different than the old Techs who passed the 5 WPM code test. Let's face it,
>on-the-air VHF/UHF activity is stagnating in many places. The only time I hear
>any significant activity on FM (144,440 MHz) here in the Boston area is during
>commuting hours. Any other time I scan each band and hear scarce activity.

And of course people continue to whine that the band is full, too.

>The only activity I detect is usually on the "main" repeaters. And the
>same thing goes for the New York area, as I travel through there frequently
>and hear the same thing....nothing. This is only FM, of course; the situation
>is even worse on the SSB/CW portion of the VHF/UHF bands. How are we
>supposed to make a case for spectrum retention when we don't effectively use
>what we have?

I'd suspect that the use of SSB/CW on and near the weak signal portions of
the VHF/UHF bands is of a greater proportion of those equipped to do it
than of FM'ers.

I once posted a comment that we'd actually benefit if the no-coders actually
drove some of the other hams off the bands.

>One good way to help promote activity is to get new people into the hobby,
>especially younger ones. The Codeless Technician license, in my opinion,
>is a decent method, perhaps not perfect, of accomplishing this goal.

>We all should welcome any and all new Hams with open arms....invite them to
>club meetings, activities, etc. Teach them the ropes, as it were. And many
>of them will even *want* to learn CW.....wait and see...

Agreed!!!!

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/*****\
/ Phil Howard -- KA9WGN -- phil@ux1.cso.uiuc.edu \
\ Lietuva laisva -- Brivu Latviju -- Eesti vabaks /
\*****/
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End of Info-Hams Digest
